

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

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100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

#### Bloomington Hospital 601 West 2<sup>nd</sup> Street Bloomington, Indiana 47403

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F105-11998-00031

Issued by:Original signed by Paul Dubenetzky
Paul Dubenetzky, Branch Chief
Office of Air Quality

Issuance Date: March 17, 2003
Expiration Date: March 17, 2008

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#### SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary general medical hospital

Authorized Individual: Rusty Rozelle, Plant Engineer

Source Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47406 Mailing Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47406

General Source Phone Number: (812) 353-5537

SIC Code: 8062 Source Location Status: Monroe

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, Section 112 of the Clean Air Act

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) natural gas-fired boilers, using no. 2 fuel oil as backup, identified as B-1, B-2, and B-3, each constructed in 2001, each with a maximum heat input rate of 20.9 million (MM) British thermal units (Btu) per hour, each exhausting to one (1) stack, identified as B-1, B-2, and B-3, respectively;
- (b) One (1) natural gas-fired boiler, using no. 2 fuel oil as backup, identified as B-4, constructed in 1971, with a maximum heat input rate of 39.3 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as B-4; and
- (c) One (1) No. 2 fuel oil fired boiler, identified as B-5, constructed in 1988, with a maximum heat input rate of 8.0 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as B-5.

#### A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month:
  - (1) Three (3) diesel fuel storage tanks, (identified as T1, T2 and T3), with maximum capacities of 1000, 2000, and 6000 gallons of fuel, respectively.
- (b) Emergency generators as follows:
  - (1) Four (4) diesel fuel fired generators rated at 1039 horsepower;
  - (2) One (1) diesel fuel fired generator rated at 335 horsepower.

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(c) Other activities not previously identified:

(1) One (1) Ethylene Oxide Sterilizer.

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

#### A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

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#### SECTION B GENERAL CONDITIONS

#### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

#### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

#### B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

#### B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

#### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

## B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(c) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

#### B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

#### B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

#### B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

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Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the within a reasonable time.

#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015 Page 10 of 33 OP No. F105-11998-00031

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within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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#### B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

### B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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#### B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
  - (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

  If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as needed to process the application.

#### B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

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#### B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

#### B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

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Failure to pay may result in administrative enforcement action, or revocation of this permit.

The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-(c) 4320 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

#### SECTION C SOURCE OPERATION CONDITIONS

#### **Entire Source**

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds Per Hour [40 CFR 52 Subpart P][326 IAC 6-3-2]
  - (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
  - (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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#### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

#### C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

#### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

#### C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

#### C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the quidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the applicable emission control procedures in 326 IAC
  14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are
  applicable for any removal or disturbance of RACM greater than three (3) linear feet on
  pipes or three (3) square feet on any other facility components or a total of at least 0.75
  cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited is federally enforceable.

#### Testing Requirements [326 IAC 2-8-4(3)]

#### C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

#### Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.14 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
  - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
    - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.

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(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

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(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

#### C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
  permit, the Permittee shall take appropriate response actions. The Permittee shall
  submit a description of these response actions to IDEM, OAQ, within thirty (30) days of
  receipt of the test results. The Permittee shall take appropriate action to minimize
  excess emissions from the affected facility while the response actions are being
  implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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#### C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

#### **Stratospheric Ozone Protection**

#### C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

- (a) Three (3) natural gas-fired boilers, using no. 2 fuel oil as backup, identified as B-1, B-2, and B-3, each constructed in 2001, each with a maximum heat input rate of 20.9 million (MM) British thermal units (Btu) per hour, each exhausting to one (1) stack, identified as B-1, B-2, and B-3, respectively;
- (b) One (1) natural gas-fired boiler, using no. 2 fuel oil as backup, identified as B-4, constructed in 1971, with a maximum heat input rate of 39.3 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as B-4; and
- (c) One (1) no. 2 fuel oil fired boiler, identified as B-5, constructed in 1988, with a maximum heat input rate of 8.0 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as B-5.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3] [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-3 (d) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from all facilities used for indirect heating purposes which were existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 pounds of particulate matter per million British thermal units heat input. Therefore PM emissions from the one (1) 39.3 MMBtu/hr boiler (B-4) shall be limited to 0.8 lb/MMBtu heat input.
- (b) Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), PM emissions from the three (3) 20.9 MMBtu/hr boilers (B1, B2 and B3) shall be limited to 0.32 lb/MMBtu heat input and the one (1) 8.0 MMBtu/hr boiler (B-5) shall be limited to 0.40 lb/MMBtu heat input based on the following formula:

$$Pt = 1.09$$
 $Q^{0.26}$ 

where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input Q = Total source maximum operating capacity rating in MMBtu/hr heat input.

D.1.2 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart Dc.

D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-2-1][40 CFR 60, Subpart Dc]

(a) Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), sulfur dioxide emissions from the three (3) 20.9 MMBtu/hr boilers, shall be limited to 0.5 pounds per million Btu heat input when combusting No. 2 fuel oil. This is equivalent to a maximum fuel oil sulfur content of 0.5% when combusting No. 2 fuel oil.

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Bloomington, Indiana OP No. F105-11998-00031

Permit Reviewer: [Linda Quigley/EVP]

(b) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the one (1) 39.3 MMBtu/hr boiler and one (1) 8.0 MMBtu/hr boiler shall be limited to 0.5 pounds per million British thermal units heat input when combusting No. 2 fuel oil; and

(c) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

Pursuant to 40 CFR 60 Subpart Dc and 326 IAC 7-1.1-2, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

#### D.1.4 Fuel Usage Limitation [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

- (a) The total input of No. 2 fuel oil and No. 2 fuel oil equivalents to the three (3) 20.9 MMBtu/hr boilers, one (1) 39.3 MMBtu/hr boiler, and one (1) 8.0 MMBtu/hr boiler (B-1, B-2, B-3, B-4 and B-5) shall be limited to less than 2,788,680 U.S. gallons per twelve (12) consecutive month period. This usage limit is required to limit the potential to emit sulfur dioxide (SO<sub>2</sub>) from the source to less than 100 tons per 12 consecutive month period, with compliance determined at the end of each month, based on a maximum fuel oil sulfur content of 0.5% by weight.
- (b) For purposes of determining compliance with paragraph (a) of this condition, the following shall apply:

each one (1) million cubic feet (MMcf) of natural gas burned shall be equivalent to 8.6 gallons of No. 2 oil, based on  $SO_2$  emissions, such that the total usage of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% and No. 2 oil equivalent input does not exceed the limit specified.

Compliance with this condition makes the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.

#### D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

#### **Compliance Determination Requirements**

#### D.1.6 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Condition D.1.3 shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
  - Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
    - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
    - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

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Bloomington Hospital Bloomington, Indiana Permit Reviewer: [Linda Quigley/EVP]

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the three (3) 20.9 MMBtu/hr boilers, one (1) 39.3 MMBtu/hr boiler, and one (1) 8.0 MMBtu/hr boiler (B-1, B-2, B-3, B-4 and B-5), using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the boilers, identified as B-1, B-2, B-3, B-4 and B-5, stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere when combusting No. 2 fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.3, D.1.4 and D.1.6, the Permittee shall maintain records in accordance with (1) through (6) below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual No. 2 fuel oil and No. 2 fuel oil equivalent usage in the boilers since last compliance determination period and equivalent sulfur dioxide emissions;
  - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and

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Bloomington Hospital Bloomington, Indiana Permit Reviewer: [Linda Quigley/EVP]

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of once per shift visible emission notations of the boilers, identified as B-1, B-2, B-3, B-4 and B-5, stack exhausts.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.9 Reporting Requirements

- (a) The natural gas boiler certification shall be submitted to the address listed in Section C General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) A quarterly summary of the information to document compliance with Condition D.1.4 shall be submitted to the address listed in Section C General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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Bloomington Hospital Bloomington, Indiana Permit Reviewer: [Linda Quigley/EVP]

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY**

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **CERTIFICATION**

Source Name: **Bloomington Hospital** 

Source Name: Source Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403

|       | ng Address:<br>OP No.: | F105-11998-00031   |                |
|-------|------------------------|--|----------------|
|       | This certification     | n shall be included when submitting monitoring, testing repo<br>or other documents as required by this permit. | orts/results   |
|       | Please check wha       | at document is being certified:  |                |
| 9     | Annual Complian        | ce Certification Letter  |                |
| 9     | Test Result (spec      | cify)  |                |
| 9     | Report (specify)       |  |                |
| 9     | Notification (spec     | ify)   | <u> </u>       |
| 9     | Affidavit (specify)    |  |                |
| 9     | Other (specify)        |  | _              |
|       |                        |  |                |
|       |                        | on information and belief formed after reasonable inquiry, the ument are true, accurate, and complete.         | statements and |
| Sig   | nature:                |  |                |
| Prir  | nted Name:             |  |                |
| Title | e/Position:            |  |                |
| Dat   | ۰۵۰                    |  |                |

Bloomington Hospital Page 28 of 33 Bloomington, Indiana OP No. F105-11998-00031

Permit Reviewer: [Linda Quigley/EVP]

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

Compliance Data Section P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: Bloomington Hospital

Source Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403 Mailing Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403

FESOP No.: F105-11998-00031

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|---|---|
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| L |   |
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|   | _ |

This is an emergency as defined in 326 IAC 2-7-1(12)

CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile

Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

#### If any of the following are not applicable, mark N/A

| Facility/Equipment/Operation:                       |
|---|
| Control Equipment:                                  |
| Permit Condition or Operation Limitation in Permit: |
| Description of the Emergency:                       |
| Describe the cause of the Emergency:                |

## If any of the following are not applicable, mark N/A Page 2 of 2 Date/Time Emergency started: Date/Time Emergency was corrected: Was the facility being properly operated at the time of the emergency? Ν Υ Describe: Type of Pollutants Emitted: TSP, PM-10, SO<sub>2</sub>, VOC, NO<sub>x</sub>, CO, Pb, other: Estimated amount of pollutant(s) emitted during emergency: Describe the steps taken to mitigate the problem: Describe the corrective actions/response steps taken: Describe the measures taken to minimize emissions: If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: Form Completed by: Title / Position: Date: Phone:

A certification is not required for this report.

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**Bloomington Hospital** Bloomington, Indiana Permit Reviewer: [Linda Quigley/EVP]

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY **COMPLIANCE DATA SECTION**

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: **Bloomington Hospital** 

601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403 Source Address: Mailing Address:

| FESOP No.:                       | F105-11998   | -00031   |                     |                                     |   |
|----------------------------------|--------------|--|---------------------|-------------------------------------|---|
| This certific                    |              | included when subr<br>ner documents as re        |                     | g, testing reports/results<br>rmit. |   |
| Report period Beginning: Ending: |              |  |                     |                                     |   |
| Boiler Affe                      | <u>ected</u> | Alternate Fuel                                   | Days burning a From | <u>alternate fuel</u><br><u>To</u>  |   |
|                                  |              |  |                     |                                     |   |
|                                  |              |  |                     |                                     |   |
|                                  |              |  |                     |                                     | _ |
|                                  |              | ation and belief former<br>true, accurate, and c |                     | le inquiry, the statements and      |   |
| Signature:                       |              |  |                     |                                     |   |
| Printed Name:                    |              |  |                     |                                     |   |
| Title/Position:                  |              |  |                     |                                     |   |
| Date:                            |              |  |                     |                                     |   |

Attach a signed certification to complete this report.

Bloomington Hospital Bloomington, Indiana Permit Reviewer: [Linda Quigley/EVP]

Phone:

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## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

#### **FESOP Quarterly Report**

| Source Name: Source Address: Mailing Address: FESOP No.: Facility: Parameter: Limit: |              | Bloomington Hospital 601 West 2 <sup>nd</sup> Street, Bloomington, Indiana 47403 601 West 2 <sup>nd</sup> Street, Bloomington, Indiana 47403 F105-11998-00031 Three (3) 20.9 MMBtu per hour boilers (B-1, B-2 and B-3), one (1) 39.3 MMBtu per hour boiler (B-4), and one (1) 8.0 MMBtu per hour boiler (B-5) No. 2 fuel oil and No. 2 fuel oil equivalent usage limit to limit SO <sub>2</sub> emissions Total input of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% and No. 2 distillate fuel oil equivalents to boilers B-1, B-2, B-3, B-4 and B-5 shall be limited to 2,788,680 U.S. gallons per twelve (12) consecutive month period, with compliance determined at the end of each month, so that SO <sub>2</sub> emissions are limited below 100 tons per year.  YEAR: |   |   |  |
|--|--------------|--|---|---|--|
|  |              | Column 1   | Column 2  | Column 1 + Column 2   |  |
| Month  | Fuel<br>Type | No. 2 Distillate Fuel<br>Oil and Equivalent<br>Usage This Month  | No. 2 Distillate Fuel Oil and<br>Equivalent Usage Previous<br>11 Months | 12 Month Total No. 2<br>Distillate Fuel Oil and<br>Equivalent Usage |  |
| Month<br>1   |              |  |   |   |  |
| Month<br>2   |              |  |   |   |  |
| Month<br>3   |              |  |   |   |  |
|  | 9            | No deviation occurred i  | in this quarter.  |   |  |
|  | 9            | Deviation/s occurred in Deviation has been rep   |   |   |  |
|  | Title        | / Position:<br>nature:   |   |   |  |

Attach a signed certification to complete this report.

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Bloomington Hospital Bloomington, Indiana Permit Reviewer: [Linda Quigley/EVP]

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Bloomington Hospital

Source Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403 Mailing Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403

| FESOP No.:   | F105-11998-      | 00031             |                        |                 |  |
|--|------------------|-------------------|------------------------|-----------------|--|
|  | Months:          | to                | Year:                  | <br>Page 1 of 2 |  |
| This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". |                  |                   |                        |                 |  |
| 9 NO DEVIATION   | ONS OCCURREI     | THIS REPORTIN     | NG PERIOD.             |                 |  |
| <b>9</b> THE FOLLOV  | VING DEVIATIO    | NS OCCURRED T     | HIS REPORTING PI       | ERIOD           |  |
| Permit Require   | ment (specify pe | rmit condition #) |                        |                 |  |
| Date of Deviati  | on:              |                   | Duration of Deviation: |                 |  |
| Number of Deviations:  |                  |                   |                        |                 |  |
| Probable Cause of Deviation:   |                  |                   |                        |                 |  |
| Response Steps Taken:  |                  |                   |                        |                 |  |
| Permit Requirement (specify permit condition #)  |                  |                   |                        |                 |  |
| Date of Deviation:   |                  |                   | Duration of Deviation: |                 |  |
| Number of Deviations:  |                  |                   |                        |                 |  |
| Probable Cause of Deviation:   |                  |                   |                        |                 |  |
| Response Steps Taken:  |                  |                   |                        |                 |  |

Bloomington Hospital Bloomington, Indiana Permit Reviewer: [Linda Quigley/EVP]

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|   | r age 2 or 2           |  |  |  |
|---|------------------------|--|--|--|
| Permit Requirement (specify permit condition #) |                        |  |  |  |
| Date of Deviation:                              | Duration of Deviation: |  |  |  |
| Number of Deviations:                           |                        |  |  |  |
| Probable Cause of Deviation:                    |                        |  |  |  |
| Response Steps Taken:                           |                        |  |  |  |
| Permit Requirement (specify permit condition #) |                        |  |  |  |
| Date of Deviation:                              | Duration of Deviation: |  |  |  |
| Number of Deviations:                           |                        |  |  |  |
| Probable Cause of Deviation:                    |                        |  |  |  |
| Response Steps Taken:                           |                        |  |  |  |
| Permit Requirement (specify permit condition #) |                        |  |  |  |
| Date of Deviation:                              | Duration of Deviation: |  |  |  |
| Number of Deviations:                           |                        |  |  |  |
| Probable Cause of Deviation:                    |                        |  |  |  |
| Response Steps Taken:                           |                        |  |  |  |
| Form Completed By:                              |                        |  |  |  |
| Title/Position:                                 |                        |  |  |  |
|   |                        |  |  |  |
| Date:   |                        |  |  |  |
| Phone:  |                        |  |  |  |

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

## Addendum to the Technical Support Document for a FESOP

Source Name: Bloomington Hospital

Source Location: 601 West 2<sup>nd</sup> Street, Bloomington, IN 47403

County: Monroe

Operation Permit No.: F105-11998-00031

SIC Code: 8062

Permit Reviewer: Linda Quigley/EVP

On September 19, 2002, the Office of Air Quality (OAQ) had a notice published in The Herald Times, Bloomington, Indiana, stating that Bloomington Hospital had applied for a FESOP to operate a general medical hospital. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

No comments were received from Bloomington Hospital.

Upon further review, the OAQ has decided to make the following changes to the FESOP. Bolded language has been added and the language with a line through it has been deleted.

- (1) The Table of Contents has been updated with the following changes:
  - C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61<del>.140</del> **Subpart M**]
  - C.24 C.18 Stratospheric Ozone Protection
- (2) Section A.1 has been changed to include a general source phone number and title of the Authorized Individual.
- A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary general medical hospital

Authorized Individual: Rusty Rozelle, Plant Engineer

Source Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47406 Mailing Address: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47406

General Source Phone Number: (812) 353-5537

SIC Code: 8062 Source Location Status: Monroe

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, Section 112 of the Clean Air Act

Bloomington Hospital Page 2 of 11
Bloomington, Indiana OP No. F105-11998-00031

Permit Reviewer: Linda Quigley/EVP

(3) Section B.3 - has been clarified with the following changes:

#### B.3 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

- (4) Since B.8 (c) Duty to Supplement and Provide Information already addresses confidentiality, the last sentence of (b) was revised to remove the statement about confidential information, and (c) was updated for clarity. Also, the condition was revised to change a rule reference. Subpart (c) references 326 IAC 17. This rule was repealed by the Air Pollution Control Board on January 26, 2000 and the new rule reference has been added.
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]
  - (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit. or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]
- (c) For information furnished by the Permittee to IDEM, OAQ the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
- (5) B.10 Compliance with Permit Conditions was revised as follows:

#### B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.

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Bloomington, Indiana OP No. F105-11998-00031

Permit Reviewer: Linda Quigley/EVP

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition Section B, Emergency Provisions.
- (6) The requirement to include emergencies in the Quarterly Deviation and Compliance Monitoring Report has been moved from B.15 to B.14. The statement at the end of (b)(4) of B.14 Emergency Provisions has been removed, because this is stated again in (f).

#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015 Bloomington Hospital Page 4 of 11
Bloomington, Indiana OP No. F105-11998-00031

Permit Reviewer: Linda Quigley/EVP

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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(7) (c) has been removed from B.15 - Deviations from Permit Requirements and Conditions. It was revised and incorporated in B.14 Emergency Provisions (above).

#### B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- (8) B.18 Permit Amendment or Revision has been revised to replace "should" with "shall" in (b).

# B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- (9) In order to be consistent with 326 IAC 2-8-15(a)(5) the rule cite has been revised in B.19(a)(5) B.19 Operational Flexibility. (b) has been removed, because this is a Part 70 requirement not a FESOP requirement.

#### B.19 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

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(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
- (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
    - (3) Any change in emissions; and
    - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c)(b) Emission Trades [326 IAC 2-8-15(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

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(d)(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

(10) B.22 (c)Transfer of Ownership or Operational Control rule cite has been corrected.

# B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11 10(b)(3)]
- (11) 326 IAC 2-1.1-7 specifies that nonpayment may result in revocation of the permit. This is not specified in 326 IAC 2-8; therefore, this rule cite is being added to B.23. Also, the section and phone number of who the Permittee can contact has been corrected in (c).

# B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 4320 (ask for OAQ, Technical Support and Modeling Section I/M & Billing Section), to determine the appropriate permit fee.
- (12) C.1 has been revised to reflect the new rule language for limiting particulate emissions.
- C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds Per Hour **[40 CFR 52 Subpart P]**[326 IAC 6-3-2<del>(c)</del>]
  - (a) Pursuant to 326 IAC 6-3-2(e) 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

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(b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

- (13) Condition C.9(e), Asbestos Abatement Projects, has been revised to correct the rule cite.
- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]
  - (e) Procedures for Asbestos Emission Control
    The Permittee shall comply with the applicable emission control procedures in 326 IAC
    14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-41, emission control requirements
    are applicable for any removal or disturbance of RACM greater than three (3) linear feet
    on pipes or three (3) square feet on any other facility components or a total of at least
    0.75 cubic feet on all facility components.
- (14) The following was added to C.11 Compliance Requirements to state what OAQ does when stack testing, monitoring, or reporting is required to assure compliance with applicable requirements:
- C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements **by issuing an order under 326 IAC 2-1.1-11.** Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

(15) Condition C.14 has been added because the source is required to perform visible emission notations. A Compliance Response Plan is required anytime there is a compliance monitoring condition in the permit. Subsequent C Section items have been re-lettered.

# C.14 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

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- (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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(16) C.17(d) (now C.18(d)) General Reporting Requirements has been revised to indicate all reports instead of quarterly report forms.

# C.17 C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (d) Unless otherwise specified in this permit, any quarterly all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (17) Condition D.1.2 (General Provisions Relating to NSPS) has been added to incorporate the requirements of 326 IAC 12-1 and 40 CFR Part 60, Subpart A. Subsequent D Section items and references have been re-lettered.
- D.1.2 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

  The provisions of 40 CFR Part 60, Subpart A General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart Dc.
- (18) The following changes have been made to Condition D.1.2 (now re-lettered D.1.3):

# D.1.2 D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-2-1][40 CFR 60, Subpart Dc]

- (a) Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), sulfur dioxide emissions from the three (3) 20.9 MMBtu/hr boilers, shall be limited to 0.5 pounds per million Btu heat input **when combusting No. 2 fuel oil**. This is equivalent to a maximum fuel oil sulfur content of 0.5% when combusting No. 2 fuel oil.
- (b) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the one (1) 39.3 MMBtu/hr boiler and one (1) 8.0 MMBtu/hr boiler shall be limited to 0.5 pounds per million British thermal units heat input or a sulfur content of less than or equal to 0.5 percent when using combusting No. 2 fuel oil; and
- (c) Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.
- (19) Condition D.1.3 (now D.1.4) has been clarified to state that compliance must be determined at the end of each month. This change is also included on the Quarterly FESOP Report Form.

# D.1.3 D.1.4 Fuel Usage Limitation [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the following limits shall apply:

- (a) The total input of No. 2 fuel oil and No. 2 fuel oil equivalents to the three (3) 20.9 MMBtu/hr boilers, one (1) 39.3 MMBtu/hr boiler, and one (1) 8.0 MMBtu/hr boiler (B-1, B-2, B-3, B-4 and B-5) shall be limited to less than 2,788,680 U.S. gallons per twelve (12) consecutive month period. This usage limit is required to limit the potential to emit sulfur dioxide (SO<sub>2</sub>) from the source to less than 100 tons per 12 consecutive month period, with compliance determined at the end of each month, based on a maximum fuel oil sulfur content of 0.5% by weight.
- (b) For purposes of determining compliance with paragraph (a) of this condition, the following shall apply:

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each one (1) million cubic feet (MMcf) of natural gas burned shall be equivalent to 8.6 gallons of No. 2 oil, based on  $SO_2$  emissions, such that the total usage of No. 2 distillate fuel oil with a maximum sulfur content of 0.5% and No. 2 oil equivalent input does not exceed the limit specified.

Compliance with this condition makes the requirements of 326 IAC 2-7 (Part 70) not applicable to the source.

(20) Condition D.1.5 was added to include a preventive maintenance plan in accordance with 326 IAC 2-8-4(9). Subsequent D.1 conditions and references have been re-lettered where necessary.

#### D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

(21) Condition D.1.6 (now re-lettered D.1.8) has been changed to include a record keeping requirement of the No. 2 fuel oil equivalent usage in the boilers.

#### D.1.6 D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.3, D.1.4 and D.1.6, the Permittee shall maintain records in accordance with (1) through (6) below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual **No. 2** fuel oil **and No. 2** fuel **oil equivalent usage in the boilers per month** since last compliance determination period and equivalent sulfur dioxide emissions:
- (22) Condition D.1.7 (now re-lettered D.1.9) has been changed to incorporate the reporting requirement for the natural gas boiler certification.

#### D.1.7 **D.1.9** Reporting Requirements

- (a) The natural gas boiler certification shall be submitted to the address listed in Section C General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) A quarterly summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

# Indiana Department of Environmental Management Office of Air Quality

# Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

#### **Source Background and Description**

Source Name: Bloomington Hospital

Source Location: 601 West 2<sup>nd</sup> Street, Bloomington, Indiana 47403

County: Monroe SIC Code: 8062

Operation Permit No.: F105-11998-00031 Permit Reviewer: Linda Quigley/EVP

The Office of Air Quality (OAQ) has reviewed a FESOP application from Bloomington Hospital relating to the operation of a general medical hospital.

# **Permitted Emission Units and Pollution Control Equipment**

This source does not have any permitted facilities.

# **Unpermitted Emission Units and Pollution Control Equipment**

The source consists of the following unpermitted facilities/units:

- (a) Three (3) natural gas-fired boilers, using no. 2 fuel oil as backup, identified as B-1, B-2, and B-3, each constructed in 2001, each with a maximum heat input rate of 20.9 million (MM) British thermal units (Btu) per hour, each exhausting to one (1) stack, identified as B-1, B-2, and B-3, respectively;
- (b) One (1) natural gas-fired boiler, using no. 2 fuel oil as backup, identified as B-4, constructed in 1971, with a maximum heat input rate of 39.3 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as B-4; and
- (c) One (1) No. 2 fuel oil fired boiler, identified as B-5, constructed in 1988, with a maximum heat input rate of 8.0 million (MM) British thermal units (Btu) per hour, exhausting to one (1) stack, identified as B-5.

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#### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month:
  - (1) Three (3) diesel fuel storage tanks, (identified as T1, T2 and T3), with maximum capacities of 1000, 2000, and 6000 gallons of fuel, respectively.
- (b) Emergency generators as follows:
  - (1) Four (4) diesel fuel fired generators rated at 1039 horsepower;
  - (2) One (1) diesel fuel fired generator rated at 335 horsepower.
- (c) Other activities not previously identified:
  - (1) One (1) Ethylene Oxide Sterilizer.

#### **Existing Approvals**

The source does not have any previous approvals.

#### **Enforcement Issue**

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Note: This source had been operating a hazardous medical infectious waste incinerator without proper permit. The incinerator was originally installed in 1989 and was dismantled in December 2000.

#### Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on March 10, 2000. The source had submitted a Title V application for the purpose of permitting a hazardous medical infectious waste incinerator, however, the incinerator was dismantled in December 2000. Therefore, a Title V permit is no longer needed and the source qualifies for the FESOP program.

There was no notice of completeness letter mailed to the source.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (pages 1 through 6).

#### **Unrestricted Potential Emissions**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the unrestricted potential emissions of the source.

| Pollutant       | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM              | 7.67                          |
| PM-10           | 3.40                          |
| SO <sub>2</sub> | 245.25                        |
| VOC             | 3.81                          |
| СО              | 44.96                         |
| NO <sub>x</sub> | 95.78                         |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

| HAP's        | Potential To Emit (tons/year) |
|--------------|-------------------------------|
| Formaldehyde | less than 10                  |
| Hexane       | less than 10                  |
| Toluene      | less than 10                  |
| TOTAL        | less than 25                  |

Note:

See Appendix A for complete listing of HAPs.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of SO<sub>2</sub> is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.
- (c) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

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#### Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

|                                      |                     | Potential to Emit<br>(tons/year) |                 |      |       |                 |       |
|--------------------------------------|---------------------|----------------------------------|-----------------|------|-------|-----------------|-------|
| Process/facility                     | PM                  | PM-10                            | SO <sub>2</sub> | VOC  | СО    | NO <sub>x</sub> | HAPs  |
| Boilers<br>(B1 - B5)                 | 2.79 <sup>(1)</sup> | 3.40                             | 99.00(1)        | 2.55 | 38.78 | 49.69(2)        | negl. |
| Emergency<br>Generators<br>(G1 - G5) | 0.79                | 0.00                             | 0.91            | 0.79 | 6.18  | 26.95           | negl. |
| Ethylene Oxide<br>Sterilizer         | 0.00                | 0.00                             | 0.00            | 0.32 | 0.00  | 0.00            | 0.32  |
| Fuel Storage<br>Tanks (T1 - T3)      | 0.00                | 0.00                             | 0.00            | 0.18 | 0.00  | 0.00            | 0.00  |
| Total Emissions                      | 3.58                | 3.40                             | 99.91           | 3.84 | 44.96 | 76.64           | 0.32  |

<sup>(1)</sup> Limited PTE reflects fuel oil usage limitation.

# **County Attainment Status**

The source is located in Monroe County.

| Pollutant       | Status     |  |  |
|-----------------|------------|--|--|
| PM-10           | attainment |  |  |
| SO <sub>2</sub> | attainment |  |  |
| $NO_2$          | attainment |  |  |
| Ozone           | attainment |  |  |
| СО              | attainment |  |  |
| Lead            | attainment |  |  |

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Monroe County has been designated as attainment or unclassifiable for ozone.

# **Federal Rule Applicability**

- (a) The three (3) 20.9 MMBtu per hour boilers, identified as B1, B2, and B3 are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) because each boiler was constructed in December 2001 and each boiler is rated at less than one hundred (100) MMBtu, but greater than ten (10) MMBtu per hour. As such, the following shall apply:
  - (1) The SO<sub>2</sub> emissions from each of the 20.9 MMBtu per hour boiler shall not exceed five tenths (0.5) pounds per million Btu heat input when burning fuel oil; or

<sup>(2)</sup> Reflects uncontrolled potential to emit of boilers B1 through B4 using natural gas and boiler B5 using fuel oil. The restricted potential to emit of boilers B1 through B5 using only fuel oil is 33.46 tons per year of NO<sub>x</sub>.

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(2) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

The Permittee shall demonstrate compliance utilizing one of the following options:

- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
  - (i) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
  - (ii) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) The one (1) 39.3 MMBtu per hour boiler, identified as B-4 and the one (1) 8.0 MMBtu per hour boiler, identified as B-5, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) because they were constructed prior to June 9, 1989.
- (c) The three (3) 20.9 MMBtu per hour boilers, the one (1) 39.3 MMBtu per hour boiler, and one (1) 8.0 MMBtu per hour boiler, identified as B-1, B-2, B-3, B-4 and B-5, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.40c), Subpart D, Da or Db, because each boiler is rated at less than one hundred (100) million British thermal units per hour (MMBtu).
- (d) This source is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.30e, Subpart Ce) for Hospital/Medical/Infectious Waste Incinerators because the source dismantled and removed its one (1) medical infectious waste incinerator in December 2000.
- (e) The three (3) diesel fuel storage tanks, (identified as T1, T2 and T3), with maximum capacity of 2000, 1000, and 6000 gallons of fuel, respectively, are not subject to the New Source Performance Standard (NSPS)(40 CFR Part 60, Subpart K) because the tanks were constructed after 1978.
- (f) The three (3) diesel fuel storage tanks, identified as T1, T2 and T3, are not subject to the New Source Performance Standards, 326 IAC 12, (40 CFR Part 60.110a, Subpart Ka; and 40 CFR Part 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" because each tank has a capacity less than 40 cubic meters.
- (g) There are no New Source Performance Standards (326 IAC 12 and 40 CFR Part 60) that are applicable to the equipment sterilization process. Also, there are no National Emissions Standards for Hazardous Air Pollutants (326 IAC 14, 40 CFR Part 61, 326 IAC 20, and 40 CFR Part 63) that apply to the equipment sterilization process because the potential to emit a single HAP is less than 10 tons per year and the potential to emit combination of HAPs is less than 25 tons per year.
- (h) The ethylene sterilization process is not subject to the National Emissions Standard for Hazardous Air Pollutants (40 CFR Part 63, Subpart O (Ethylene Oxide Emissions Standards for Sterilization Facilities)) because this subpart does not apply to ethylene oxide sterilization operations at stationary sources such as hospitals, doctors offices, clinics, or other facilities whose primary purpose is to provide medical services to humans or animals.

# Permit Reviewer: Linda Quigley/EVP

State Rule Applicability - Entire Source

# 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is not subject to this rule because potential uncontrolled emissions of all criteria pollutants are less than 250 tons per year. This source is also not one of the 28 listed source categories. Therefore, this source is not subject to the requirements of 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)).

#### 326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6, a source located within a specifically listed county, or having the potential to emit at or greater than 100 tons per year of any criteria pollutant, is subject to this rule. This source is located in Monroe County which is not one of the specifically listed counties, nor does this FESOP source have the potential to emit CO, VOC, NO<sub>x</sub>, PM-10, or SO<sub>2</sub> in amounts at or greater than a 100 tons per year. Therefore, the requirements of 326 IAC 2-6 do not apply to the source.

#### 326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the usage of No. 2 distillate fuel oil, with a maximum sulfur content of 0.5%, and No. 2 distillate fuel oil equivalents shall be limited to 2,788,680 U.S. gallons per twelve (12) consecutive month period, so that  $SO_2$  emissions are limited below 100 tons per year (see calculations on page 5 of 6, Appendix A). Therefore, the requirements of 326 IAC 2-7 do not apply.

# 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Individual Facilities

# 326 IAC 2-4.1-1 (Major Sources of Hazardous Air Pollutants (HAP))

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The operation of Ethylene Oxide Sterilizer and the boilers (B1 through B5) will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs, respectively. Therefore, 326 IAC 2-4.1-1 does not apply.

#### 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

(a) Pursuant to 326 IAC 6-2-3 (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units which began operation on or before June 8, 1972, shall in no case exceed 0.8 lb/MMBtu heat input.

The limitation based on the following equation is higher than 0.8 lbs PM/MMBtu:

Pt =  $(C*a*h)/(76.5*Q^{0.75*}N^{0.25})$ 

Bloomington Hospital Bloomington, Indiana

Permit Reviewer: Linda Quigley/EVP

Where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input C = maximum ground level concentration (50Fg/m3, for a period not to exceed 60 min.)

Q = total source max. indirect heater input = 39.3 (B-4) N = number of stacks in the fuel burning operation = 1

a = plume rise factor (0.67, for Q < 1,000) h = average stack height in feet = 68 feet

(B-4) Pt =  $(50*0.67*68)/(76.5*39.3^{0.75}*1^{0.25})$  = 1.90 lbs PM/MMBtu

Based on Appendix A, the total potential to emit of PM from the one (1) boiler, identified as B-4, constructed in 1971, is 2.46 tons per year.

2.46 tons/yr x (2000 lbs/ton/8760 hrs/yr) = 0.56 lbs/hr (0.56 lbs/hr / 39.3 MMBtu/hr) = 0.015 lbs PM per MMBtu Therefore, the one (1) boiler, identified as B-4, will comply with this rule.

(b) Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units constructed after September 21, 1983 shall be limited using the following equation:

$$Pt = 1.09$$
 $Q^{0.26}$ 

where: Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input Q = Total source maximum operating capacity rating in MMBtu/hr heat input.

For B-5 (constructed in 1988) Q = 47.3 = 39.3 + 8.0For B-1, B-2, B-3 (all constructed in 2001) Q = 110.4 = 47.7 + 62.7

(B-5) Pt =  $(1.09/47.3^{0.26})$  = 0.40 lbs PM/MMBtu (B-1, B-2, B-3) Pt =  $(1.09/110.4^{0.26})$  = 0.32 lbs PM/MMBtu

Based on Appendix A, the potential to emit of PM from the four (4) boilers identified as B1, B2, B3 and B5, all constructed after September 21, 1983, is 4.42 tons per year.

For B1, B2 and B3 1.31 tons/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.30 lbs/hr, each

(0.30 lbs/hr / 20.9 MMBtu/hr) = 0.014 lbs PM per MMBtu, each

For B5 0.50 tons/yr x (2000 lbs/ton / 8760 hrs/yr) = 0.11 lbs/hr (0.11 lbs/hr / 8.0 MMBtu/hr) = 0.014 lbs PM per MMBtu

Therefore, the four (4) boilers, identified as B1, B2, B3, and B5 will comply with this rule.

#### 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

As facilities with a potential to emit (PTE) of sulfur dioxide ( $SO_2$ ) at or greater than 25 tons per year, the four (4) natural gas-fired boilers using no. 2 fuel oil as back-up fuel and one (1) no. 2 fuel oil fired boiler are subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations). Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from the five (5) boilers using No. 2 fuel oil shall be limited to 0.5 pounds per million BTU heat input when using No. 2 fuel oil. This equates to a fuel oil sulfur content limit of 0.5% (see calculations on page 5 of 6, Appendix A). The source shall use natural gas or No. 2 fuel oil with a maximum sulfur content of 0.5% to be in compliance with 326 IAC 7-1.1.

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Permit Reviewer: Linda Quigley/EVP

# 326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

This source is subject to 326 IAC 7-1 for the four (4) natural gas-fired boilers using no. 2 fuel oil as back-up fuel and one (1) no. 2 fuel oil fired boiler. As such, and pursuant to 326 IAC 7-2 (Compliance), the source shall demonstrate compliance with the 326 IAC 7-1  $SO_2$  emission limitation by recording, and submitting to the OAQ upon request, the information as specified, including fuel sulfur content, heat content, fuel consumption, and sulfur dioxide emission rates based on a calendar-month average.

#### **Testing Requirements**

Testing is not required for the three (3) 20.9 MMBtu per hour boilers, the one (1) 39.3 MMBtu per hour boiler, or the one (1) 8.0 MMBtu per hour boiler, identified as B-1, B-2, B-3, B-4 and B-5, because there are no control devices and emissions were based on AP-42 emission factors.

# **Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this source.

#### Conclusion

The operation of this general medical hospital shall be subject to the conditions of the attached proposed FESOP No.: F105-11998-00031.

#### Appendix A: Emission Calculations

Company Name: Bloomington Hospital

Address City IN Zip: 601 West 2nd Street, Bloomington, IN 47403

FESOP: 105-11998
PIt ID: 105-00031
Reviewer: Linda Quigley/EVP

#### Uncontrolled Potential Emissions (tons/year)

| Emissions Generating Activity |   |                                       |  |                         |                               |                           |         |  |  |
|-------------------------------|---|---------------------------------------|--|-------------------------|-------------------------------|---------------------------|---------|--|--|
| Pollutant                     | Natural Gas Combustion<br>Boilers B-1 through B-4 | # 2 Fuel Oil Combustion<br>Boiler B-5 | # 2 Fuel Oil Combustion  Boilers B-1 through B-5 | Emergency<br>Generators | Ethylene Oxide<br>Sterilizer* | Diesel Fuel Storage Tanks | TOTAL** |  |  |
| PM                            | 0.85  | 0.50                                  | 6.88   | 0.79                    | 0.00                          | 0.00                      |         |  |  |
| PM10                          | 3.40  | 0.00                                  | 0.00   | 0.00                    | 0.00                          | 0.00                      |         |  |  |
| SO2                           | 0.27  | 17.77                                 | 244.34   | 0.91                    | 0.00                          | 0.00                      | 24      |  |  |
| NOx                           | 44.68   | 5.01                                  | 68.83  | 26.95                   | 0.00                          | 0.00                      | 9       |  |  |
| VOC                           | 2.46  | 0.09                                  | 1.17   | 0.79                    | 0.32                          | 0.18                      | :       |  |  |
| CO                            | 37.53   | 1.25                                  | 17.21  | 6.18                    | 0.00                          | 0.00                      | 4       |  |  |
| total HAPs                    | negl  | negl                                  | negl   | negl.                   | 0.32                          | 0.00                      |         |  |  |
| worst case single HAP         | neal.   | negl.                                 | negl.  | neal.                   | 0.32                          | 0.00                      |         |  |  |

Total emissions based on rated capacity at 8,760 hours/year.

\*\*The total represents the worst case emissions for each pollutant.

#### Controlled Potential Emissions (tons/year)

|                                     | Emissions Generating Activity                     |                                       |  |                         |                               |                              |               |  |  |
|-------------------------------------|---|---------------------------------------|--|-------------------------|-------------------------------|------------------------------|---------------|--|--|
| Pollutant                           | Natural Gas Combustion<br>Boilers B-1 through B-4 | # 2 Fuel Oil Combustion<br>Boiler B-5 | # 2 Fuel Oil Combustion<br>Boilers B-1 through B-5 | Emergency<br>Generators | Ethylene Oxide<br>Sterilizer* | Diesel Fuel<br>Storage Tanks | TOTAL**       |  |  |
| PM                                  | 0.85  | 0.50                                  | 2.79   | 0.79                    | 0.00                          | 0.00                         | 3.5           |  |  |
| PM10<br>SO2                         | 3.40<br>0.27                                      | 0.00<br>17.77                         | 0.00<br>99.00                                      | 0.00                    | 0.00                          | 0.00                         | 3.40<br>99.91 |  |  |
| NOx                                 | 44.68   | 5.01                                  | 33.46  | 26.95                   | 0.00                          | 0.00                         | 76.64         |  |  |
| VOC<br>CO                           | 2.46<br>37.53                                     |                                       | 0.28<br>6.97                                       | 0.79<br>6.18            | 0.32<br>0.00                  | 0.18<br>0.00                 | 3.84<br>44.96 |  |  |
| total HAPs<br>worst case single HAP | negl.   | negl.                                 | negl.  | negl.<br>negl.          | 0.32<br>0.32                  | 0.00                         | 0.32          |  |  |
|                                     |   |                                       |  | -                       |                               |                              |               |  |  |

Total emissions based on rated capacity at 8,760 hours/year, after control.

\*\*The total represents the worst case emissions for each pollutant.

<sup>\*</sup> Based on emission calculations provided by the source.

<sup>\*\*</sup>Boilers B-1 through B-4 use natural gas as the primary fuel and #2 fuel oil as back up fuel. Boiler B-5 uses #2 fuel oil as the primary fuel.

<sup>\*</sup> Based on emission calculations provided by the source.

<sup>\*\*</sup>Boilers B-1 through B-4 use natural gas as the primary fuel and # 2 fuel oil as back up fuel. Boiler B-5 uses #2 fuel oil as the primary fuel.

# Appendix A: Emissions Calculations Natural Gas Combustion MM BTU/HR <100

**Small Industrial Boilers** 

Company Name: Bloomington Hospital

Address City IN Zip: 601 West 2nd Street, Bloomington, IN 47403

FESOP: 105-11998-00031

PIt ID: 105-00031

Reviewer: Linda Quigley/EVP

| Unit ID | Heat Input Capacity<br>MMBtu/hr | Potential Throughput MMCF/yr |
|---------|---------------------------------|------------------------------|
| B-1     | 20.9                            | 183.1                        |
| B-2     | 20.9                            | 183.1                        |
| B-3     | 20.9                            | 183.1                        |
| B-4     | 39.3                            | 344.3                        |
| Total   | 102                             | 893.52                       |

#### Pollutant

|                               | PM*  | PM10* | SO2  | NOx         | VOC  | CO    |
|-------------------------------|------|-------|------|-------------|------|-------|
| Emission Factor in lb/MMCF    | 1.9  | 7.6   | 0.6  | 100.0       | 5.5  | 84.0  |
|                               |      |       |      | **see below |      |       |
| Potential Emission in tons/yr | 0.85 | 3.40  | 0.27 | 44.68       | 2.46 | 37.53 |

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

# Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32



# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

# **Small Industrial Boiler**

**HAPs Emissions** 

Company Name: Bloomington Hospital

Address City IN Zip: 601 West 2nd Street, Bloomington, IN 47403

FESOP: 105-11998-00031

PIt ID: 105-00031

Reviewer: Linda Quigley/EVP

# HAPs - Organics

| Emission Factor in lb/MMcf    | Benzene   | Dichlorobenzene | Formaldehyde | Hexane    | Toluene   |
|-------------------------------|-----------|-----------------|--------------|-----------|-----------|
|                               | 2.1E-03   | 1.2E-03         | 7.5E-02      | 1.8E+00   | 3.4E-03   |
| Potential Emission in tons/yr | 9.382E-04 | 5.361E-04       | 3.351E-02    | 8.042E-01 | 1.519E-03 |

# HAPs - Metals

| Emission Factor in lb/MMcf    | Lead      | Cadmium   | Chromium  | Manganese | Nickel    |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
|                               | 5.0E-04   | 1.1E-03   | 1.4E-03   | 3.8E-04   | 2.1E-03   |
| Potential Emission in tons/yr | 2.234E-04 | 4.914E-04 | 6.255E-04 | 1.698E-04 | 9.382E-04 |

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

# Appendix A: Potential Emissions Calculations No. 2 Fuel Oil Combustion Only MM BTU/HR <100 Boiler B-5

Company Name: Bloomington Hospital

Address City IN Zip: 601 West 2nd Street, Bloomington, IN 47403

**FESOP:** 105-11998 **PIt ID:** 105-00031

Reviewer: Linda Quigley/EVP

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr kgals/year S = Weight % Sulfur

8.0 70.1 500.6 0.5

#### Heat Input Capacity includes:

one (1) 8.0 MMBtu/hr waste heat boiler capable of burning No. 2 distillate fuel oil only.

|  | Pollutant          |       |       |      |      |  |
|--|--------------------|-------|-------|------|------|--|
|  | PM SO2 NOx* VOC CO |       |       |      |      |  |
| Emission Factor in lb/kgal (No. 2 fuel oil combustion) | 2.0                | 142S  | 20.00 | 0.3  | 5.0  |  |
| Potential Emissions burning No. 2 fuel oil, tons/yr    | 0.50               | 17.77 | 5.01  | 0.09 | 1.25 |  |

#### Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for CO from natural gas combustion: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 37

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors for No. 2 fuel oil combustion are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03)

Emissions from No. 2 fuel oil combustion (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

#### Compliance with 326 IAC 7-1.1-2

The following calculations determine the maximum sulfur content of #2 distillate fuel allowed by 326 IAC 7-1-.1-2:

Facility will comply with 326 IAC 7-1.1-2 by using fuel oil with a limited 0.50% sulfur content.

# Appendix A: Potential Emissions Calculations No. 2 Fuel Oil Combustion Only MM BTU/HR <100

Boilers B-1 through B-5

Company Name: Bloomington Hospital

Address City IN Zip: 601 West 2nd Street, Bloomington, IN 47403

**FESOP:** 105-11998 PIt ID: 105-00031 Reviewer: Linda Quigley/EVP

**Heat Input Capacity** 

Potential Throughput

MMBtu/hr MMCF/yr kgals/year S = Weight % Sulfur

110.0 963.6 6882.9 0.5

Heat Input Capacity includes:

three (3) 20.9 MMBtu/hr boilers, one (1) 39.3 MMBtu/hr boiler, all capable of burning natural gas or No. 2 distillate fuel oil.

one (1) 8.0 MMBtu/hr waste heat boiler capable of burning No. 2 distillate fuel oil only.

|  | Pollutant |        |       |      |       |
|--|-----------|--------|-------|------|-------|
|  | PM        | SO2    | NOx*  | VOC  | СО    |
| Emission Factor in lb/kgal (No. 2 fuel oil combustion) | 2.0       | 142S   | 20.00 | 0.3  | 5.0   |
| Potential Emissions burning No. 2 fuel oil, tons/yr    | 6.88      | 244.34 | 68.83 | 1.17 | 17.21 |

**Heat Input Capacity** 

Limited Throughput

MMBtu/hr

MMCF/yr 963.6

kgals/year S = Weight % Sulfur

110.0

2788.68 0.5

Heat Input Capacity includes:

three (3) 20.9 MMBtu/hr boilers, one (1) 39.3 MMBtu/hr boiler, all capable of burning natural gas or No. 2 distillate fuel oil.

one (1) 8.0 MMBtu/hr waste heat boiler capable of burning No. 2 distillate fuel oil only.

|  | Pollutant |       |       |      |      |
|--|-----------|-------|-------|------|------|
|  | PM        | SO2   | NOx*  | VOC  | СО   |
| Emission Factor in lb/kgal (No. 2 fuel oil combustion) | 2.0       | 142S  | 24.00 | 0.2  | 5.0  |
| Limited Emissions burning No. 2 fuel oil, tons/yr      | 2.79      | 99.00 | 33.46 | 0.28 | 6.97 |

#### Note:

Limited emissions are based on a No. 2 fuel oil usage limitation of 2,788,680 gallons per year (232,390 gallons per month), and a sulfur content limit of 0.5% by weight. Natural gas usage is not limited.

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for CO from natural gas combustion: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 37

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors for No. 2 fuel oil combustion are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03)

Emissions from No. 2 fuel oil combustion (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

#### Compliance with 326 IAC 7-1.1-2

The following calculations determine the maximum sulfur content of #2 distillate fuel allowed by 326 IAC 7-1-.1-2:

0.5 lb/MMBtu x 140,000 70 lb/1000 gal Btu/gal = 70 lb/1000 gal/ 142 lb/1000 qal =0.5 %

Sulfur content must be less than or equal to 0.5 % to comply with 326 IAC 7-1.1-2.

Facility will comply with 326 IAC 7-1.1-2 by using fuel oil with a limited 0.50% sulfur content.

# Appendix A: Emission Calculations Internal Combustion Engines - Diesel Fuel Emergency Generator (>600 HP)

Company Name: Bloomington Hospital

Address City IN Zip: 601 West 2nd Street, Bloomington, IN 47403

**FESOP:** 105-11998 **PIt ID:** 105-00031

Reviewer: Linda Quigley/EVP

#### Emissions calculated based on output rating (hp)

Power Output Potential Throughput

Horsepower (hp) hp-hr/yr

| 4491 0 | 2245500.0 |
|--------|-----------|

| Facilities      | HP   |  |  |
|-----------------|------|--|--|
| Generator (G-1) | 1039 |  |  |
| Generator (G-2) | 1039 |  |  |
| Generator (G-3) | 1039 |  |  |
| Generator (G-4) | 1039 |  |  |
| Generator (G-5) | 335  |  |  |
| Total           | 4491 |  |  |

| S= [ | 0.1 | = WEIGHT % SULFUR |
|------|-----|-------------------|
|------|-----|-------------------|

|                               |        | Pollutant    |           |             |         |         |  |
|-------------------------------|--------|--------------|-----------|-------------|---------|---------|--|
|                               | PM*    | PM10*        | SO2       | NOx         | VOC     | CO      |  |
| Emission Factor in lb/hp-hr   | 0.0007 |              | 0.0008    | 0.024       | 0.00071 | 0.00550 |  |
|                               |        | not provided | (.00809S) | **see below |         |         |  |
|                               |        |              |           |             |         |         |  |
| Potential Emission in tons/yr | 0.79   | 0.00         | 0.91      | 26.95       | 0.79    | 6.18    |  |

<sup>\*\*</sup>NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr Note that the PM10 emission factor in lb/hp-hr is not provided in the Supplement B update of AP-42.

#### Methodology

Potential Throughput (hp-hr/yr) = hp \* 500 hr/yr

Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1.

Emission (tons/yr) = [Potential Throughput (hp-/hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

PTE was calculated using 500 hours per year for emergency generator.

<sup>\*</sup> No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included.